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ABSTRACT

Preliminary findings of a survey of Cherokee language and education and the data collection and analysis methods are reported. The survey was designed to study language use, bilingualism, and education in the Cherokee community. The scope of the survey encompassed Cherokee children between the ages of 5 and 14 who attended public school and lived within the traditional area of the Cherokee Nation. A total of 198 children were randomly selected from eight schools within this area. Major findings are summarized regarding (1) household language use, (2) individual language use and change across generations, (3) children's language proficiency, (4) opinions about languages and bilingualism, (5) bilingual education, (6) language learning and teaching at home, and (7) the impact of television and radio. Information is provided on how the survey was organized, designed, and conducted. The procedures for selecting the respondents and the characteristics of the respondents are described. (RW)

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LANGUAGE AMONG THE CHEROKEE: PATTERNS OF LANGUAGE USE IN NORTHEASTERN OKLAHOMA

PART I: PRELIMINARY REPORT

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November, 1982

08-82

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At NCBR Berdan had primary responsibility for the design of the study. Sanchez compiled the Codebook, coded and cleaned the data, and assisted with the data analysis. So designed the secondary tabulations and data analysis, and wrote one of the drafts of this report. Dr. David Lopez assisted in the design of the sample. He and Dr. Reynaldo Macias, University of Southern California, also reviewed the questionnaire at various stages. Ms. Joann Morris, then with the Los Angeles Unified School District, coordinated the external review of the questionnaire with a national panel of Indian researchers. The authors are extremely grateful for the opportunity to work with these and the many other helpful and supportive persons who have shown great concern about the role of Cherokee language in the lives of Cherokee people.

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Introduction

The Cherokee language plays an important but changing function for the Cherokees of northeastern Oklahoma. It is valued highly by a large portion of that population. The English language is also seen as important, but for rather different reasons. The ability to use both languages is clearly the ideal. The extent to which this bilingualism is realized, however, depends in part on which Cherokees are being considered--those who identify themselves as Cherokee, those who are enrolled in the Cherokee Nation of Oklahoma, or those who have strong ancestral ties to the Cherokee people. Even within these sometimes competing and sometimes overlapping characterizations of the Cherokee population, the use and role of the Cherokee language is changing across generations, and changing differently depending on residence patterns. In this report, we aim to accomplish the following two goals:

1. To discuss some of the interesting preliminary findings of the Cherokee Language and Education Survey, concentrating particularly on those points which may have implications for the development of tribal policies or for future research.

2. To review the data collection and the data analysis procedures with sufficient detail to make these preliminary findings interpretable, and to allow continued analysis of the data set which has resulted from the survey.

These goals concern a group of readers that is not limited to survey research professionals. This report, therefore, is not primarily a technical report of survey detail or of statistical analysis. Findings are presented in general summaries and tables; some technical information is included in appendices. One restriction on the scope of this report should be noted from the beginning: The report does not attempt to make statements about the overall Cherokee population, and some care must be taken in making generalizations from the sample included in the survey to the overall population from which it is drawn.

Purpose of the Survey

Two primary purposes led to the development of this survey. The first was to develop information on language use, bilingualism, and education in a small language group. The phrase "small language group" here includes many different language minorities for whom little, if any, information is ever published by the Bureau of the Census, and which are regularly excluded or ignored in national surveys of language use and proficiency. Virtually all American Indian languages, with the occasional exception of Navajo, fall in this category. The first purpose then is to provide information for a small language group comparable to that which is available either nationally or for large language groups such as Spanish speakers.

The second purpose is specific to the Cherokee Nation of Oklahoma and its tribal government. The Cherokee are the second largest Indian tribe in the United States. The use and role of the Cherokee language is of considerable concern, both to the tribal membership and to its government. The often related issue of education is of high priority to the Tribe, but little current and reliable information is available for the formulation of tribal policy.[1] To provide information on language use and education for the Cherokee Nation is the second, and perhaps most immediately important, purpose for this survey.

Scope of the Survey

The sample for the survey is drawn from families with children who have all of the following characteristics:

- the child is in public school

[1]The 1970 Census report on American Indian languages does not report separately on Cherokee, but groups it with other Iroquoian languages such as Mohawk (U.S. Bureau of the Census, 1973). Chafe's (1962) estimates are sometimes still cited, but they are now a generation of speakers out of date, and were rather informal estimates in the first place. Other studies of language among the Cherokee are reported in Wahrhaftig (1968), Pulte (1973) and Guyette (1975). Fogelson (1978) provides a general, annotated bibliography of the Cherokee people; pp. 31-38 deal specifically with language.

- the child is between 5 and 14 years old
- the child is identified by parents or school as Cherokee
- the family resides within the traditional area of the Cherokee Nation

One hundred and ninety-eight (198) children were randomly selected from eight schools in the Cherokee area. The schools were randomly selected to represent both urban and rural areas, and areas of high and low concentration of Cherokees in the population (see Table 10).

The survey is patterned in part on the 1978 national Children's English and Services Study (CESS) (O'Malley, 1981, 1982). It contains questions about education and language for the household and all its members, and includes an English language proficiency test for the children. It also includes numerous questions of particular interest to the Tribe.

Contributors to the Survey

The survey was developed by the National Center for Bilingual Research in collaboration with the Cherokee Nation of Oklahoma. The field work was managed by Susan Hardin, of Northeastern State University of Oklahoma, and conducted by teams subcontracted through each of the eight participating school districts. More information about the background, design and participants in the survey is given in Part 3, following these preliminary findings.

Major Findings

Household Language Use

The survey set out to discover not only how many households were bilingual, or monolingual in either Cherokee or English, but also how bilingual the households were. Divided into six classifications, ranging from Cherokee only, to various bilingual patterns, to English only, the following distribution of households was found:

Table 1. Household Language Use

Cherokee Monolingual	0%
Cherokee Monolingual, English traces	0%
Cherokee Dominant, English often	13%
English Dominant, Cherokee often	15%
English Monolingual, Cherokee traces	20%
English Monolingual	53%
Total	101%
(N)	(192)

This sample overwhelmingly uses English, but only about half the households use English to the total exclusion of Cherokee. About 28% of the households can be called truly bilingual. In the national CESS survey these households would be included in the category called "non-English language background" (NELB). This sample of nearly 200 households includes no monolingual Cherokee households. Given all the other indications that exist, it seems highly unlikely that there are no monolingual Cherokee households. It may be that such households are relatively rare, that by chance they did not fall into this random

sample, that they do not have school-aged children, or that their children are not enrolled in public schools.

The process by which the sample was selected may also have introduced bias toward English speaking households, a potential problem discussed in Part 3, the section on background information.

Trying to find out how bilingual or how monolingual a household is proves to be a bit complicated. To detect this, most surveys use several questions. The Cherokee survey used the same three questions that were used in the 1976 national Survey of Income and Education, and in the CESS:

1. What language do the people in this household usually speak?

2. Do the people in this household often speak another language? What is that language?

3. Are any other languages spoken or understood by any of the people who live in this household? What is that language or languages?

The questions ask both about <u>frequency</u> of language use, and about households (questions 1 and 2) and individuals (question 3). Patterns of responses across these three questions were analyzed to form the following six categories of language use:

a. Cherokee Monolingual--use only Cherokee (1) and no other language (2,3).

b. Cherokee Monolingual, English Traces--only Cherokee is used in the household (1,2), but some individual also knows some English (3).

c. Cherokee Dominant, English Often--Cherokee is the usual household language (1), but English is also used often in the household (2).

d. English Dominant, Cherokee Often--English is the usual household language (1), but Cherokee is also used often in the household (2).

e. English Monolingual, Cherokee Traces--only English is used in the household (1,2), but some individual also knows some Cherokee (3).

f. English Monolingual--use only English (1) and no other language (2,3).

Of these six classifications only categories c and d represent fully bilingual households. Categories b and e are essentially monolingual households, but some individual also uses, or at least knows something of, the other language. Categories a and f are strictly monolingual in English or Cherokee, respectively.

Regional Differences. There are considerable differences in the proportion of bilingual households, depending on where the families live. There are more bilingual households in rural communities than in urban communities, and more bilingual households in communities with a high proportion of Cherokee residents.

Table 2. Household Language Use by Region

	Rural		Urban	
	High % Indian	Low % Indian	High % Indian	Low % Indian
Cherokee Dominant, English Often	27%	9%	15%	0%
English Dominant, Cherokee Often	35%	13%	8%	2%
English Monolingual, Cherokee Traces	12%	17%	33%	18%
English Monolingual	27%	61%	44%	80%
Total	100%	100%	100%	100%
(N)	(49)	(46)	(48)	(49)

Tribal Membership. The patterns of language use also show differences related to membership in the Cherokee Nation. Slightly less than half of the families have one or both parents enrolled in the Cherokee Nation of Oklahoma. If both parents are members of the Tribe it is more likely that the household will be bilingual than if only one parent is a member. Households in which neither parent is a member of the Tribe, however, are not exclusively monolingual speakers of English. Use of Cherokee in these households is comparable to, perhaps greater

than, households where only one parent is enrolled in the Tribe. A considerable number of households did not give information for tribal membership, making interpretation of these numbers somewhat difficult. One-third of the households which did not respond to the tribal membership question use primarily Cherokee, another 29% use some Cherokee.

Table 3. Household Language Use by Tribal Membership

	Both Parents Member	One Parent Member	No Parent Member	No Answer
Cherokee Dominant, English Often	17%	5%	7%	35%
English Dominant, Cherokee Often	31%	7%	15%	13%
English Monolingual, Cherokee Traces	28%	25%	15%	16%
English Monolingual	35%	63%	63%	35%
Total	100%	100%	100%	99%
(N)	(29)	(60)	(72)	(31)

Blood Quantum. As might be expected, there is also a very strong relationship between household language use patterns and Indian blood quantum of household members, particularly of mothers: The higher the blood quantum, the more likely it is that the Cherokee language will be used in the household. It should be noted that "Indian blood quantum" is an indicator of a wide range of cultural patterns. It is not legitimate to assume, and this survey does not support, any direct causal relationship between a geneological concept such as blood quantum and language use or maintenance. Blood quantum was asked of all adults in the household. Responses are more complete for mothers than for fathers, and the relationship to language use patterns of the household is stronger for mothers than for fathers (mothers were also the usual respondents for the households). Table 4 shows household language use patterns in relationship to the mothers' Indian blood quantum.

Table 4. Household Language Use by Mothers' Blood Quantum

	less than 0	.25	.25-.99	Full Blood	No Answer
Cherokee Dominant, English Often	0%	0%	4%	36%	27%
English Dominant, Cherokee Often	0%	8%	12%	39%	5%
English Monolingual, Cherokee Traces	17%	21%	30%	20%	0%
English Monolingual	83%	71%	54%	5%	68%
Total	100%	100%	100%	100%	100%
(N)	(24)	(52)	(50)	(44)	(22)

For households where the mother has no Cherokee blood, the households are English monolingual. For households with mothers less than one-fourth Cherokee, 8% of the households are bilingual, but none is Cherokee dominant. For full blood Cherokee mothers, three-fourths of the households are bilingual.

It should be noted that blood quantum, tribal membership, and region of residence are highly inter-related. This preliminary report does not show which of the relationships to language use patterns is only an artifact of these inter-relationships.

Individual Language Use and Change Across Generations

For each individual in the household, language use questions were also asked. These were quite similar to the household questions:

1. What language does (person) usually speak?
2. Does (person) speak any other language often? Specify.
3. Is there any other language or languages that (person) understands or speaks at all? Specify.

These three questions were again combined into a six-point scale using the same labels as the household language scale, but with slightly different meanings:

a. Cherokee Monolingual
   uses only Cherokee (1) and no other language (2,3).

b. Cherokee Monolingual, English traces
   uses Cherokee almost always (1,2), but does know some English (3).

c. Cherokee Dominant, English Often
   usually uses Cherokee (1), but also uses English often (2,3).

d. English Dominant, Cherokee Often
   usually uses English (1), but also uses Cherokee often (2,3).

e. English Monolingual, Cherokee Traces
   uses English almost always (1,2), but does know some Cherokee (3).

f. English Monolingual
   uses only English (1) and no other language (2,3).

Unlike the households, there are some individuals in the survey who are classified in each of these six categories, including Cherokee Monolingual. There is, however, a marked difference in the use of Cherokee across generations. Table 5 shows language use patterns for the child identified in the school, the child's mother, and for the child's grandmother on the mother's side (mother's mother).

Table 5. Language Use Patterns Across Three Generations

	Child School		Mother		Mother	Mother's
Cherokee Monolingual	0%	**(0%)**	0%	**(0%)**	7%	**(7%)**
Cherokee Monolingual, English Traces	0%	**(0%)**	0%	**(0%)**	6%	**(13%)**
Cherokee Dominant, English Often	6%	**(6%)**	13%	**(13%)**	23%	**(36%)**
English Dominant, Cherokee Often	12%	**(18%)**	13%	**(26%)**	9%	**(45%)**
English Monolingual, Cherokee Traces	14%	**(32%)**	9%	**(35%)**	2%	**(47%)**
English Monolingual	68%	**(100%)**	65%	**(100%)**	52%	**(99%)**
Total	100%		100%		99%	
(N)	(192)		(183)		(165)	

(Boldface shows cumulative percentages)

The only Cherokee monolinguals who speak no English at all are in the grandparents' generation. When limited knowledge of English is included, 13% of the grandmothers and none of the mothers or children are classed as Cherokee monolinguals. Nearly half of the grandmothers use Cherokee often, or more frequently; only about a fourth of the mothers or a fifth of the children do.

Considered conversely from the point of view of language change, already in the grandmothers' generation, half are English monolingual; 63% are at least English dominant. By the mothers' generation, three-fourths are English monolingual, and 85% are English dominant. For the children, four-fifths are English monolingual, and all but 6% are English dominant.

Regional Differences. Like the patterns of household language use, these generational patterns are differ sharply according to regions of residence, as shown in Table 6.

Table 6. Generational Language Patterns by Region

	Rural		Urban	
Grandmother's Language	High % Indian	Low % Indian	High % Indian	Low % Indian
Cherokee Monolingual	15%	0%	13%	0%
Cherokee Monolingual, English Traces	15%	2%	4%	3%
Cherokee Dominant, English Often	42%	20%	25%	3%
English Dominant, Cherokee Often	5%	13%	13%	3%
English Monolingual, Cherokee Traces	2%	4%	2%	0%
English Monolingual	22%	61%	42%	91%
Total	101%	100%	99%	100%
(N)	(41)	(46)	(45)	(33)
Mother's Language				
Cherokee Dominant, English Often	33%	5%	17%	0%
English Dominant, Cherokee Often	28%	11%	11%	4%
English Monolingual, Cherokee Traces	3%	9%	15%	8%
English Monolingual	38%	75%	57%	88%
Total	102%	100%	100%	100%
(N)	(40)	(44)	(47)	(49)

Table 6. Generational Language Patterns by Region (cont.)

	Rural		Urban	
Child's Language	High % Indian	Low % Indian	High % Indian	Low% Indian
Cherokee Dominant, English Often	18%	2%	4%	0%
English Dominant, Cherokee Often	25%	9%	13%	0%
English Monolingual, Cherokee Traces	18%	13%	23%	2%
English Monolingual	39%	76%	61%	98%
Total	100%	100%	101%	100%
(N)	(49)	(46)	(48)	(49)

(Numbers may not add to 100% because of roundings)

English is by far the most prevalent language in urban areas which have a relatively low proportion of Cherokees. Even for the grandmothers' generation, more than 90% are English monolingual in these areas. For the children in these areas, use or knowledge of Cherokee seems almost nonexistent; they are all English monolingual. In the rural areas with a relatively low proportion of Cherokees, about two thirds of the grandmothers are English monolingual. This proportion increases considerably in the mothers' generation.

In the areas in which Cherokees constitute a larger part of the population, the grandmothers' generation contains a sizable number of Cherokee monolinguals, about 30% in the rural areas. In these areas about one-fourth are English monolingual. In the mother's generation there are no Cherokee monolinguals, even in rural areas with concentrated Cherokee population. For the children's generation, Cherokee use is centered in those rural areas with relatively higher Cherokee population. There, more than half of the children know at least some Cherokee, and a sizable number are Cherokee dominant.

In general, it seems that the shift to English in areas with fewer Cherokees was already well established in the grandmothers' generation. By the children's generation, it is almost total in urban areas. In rural areas, particularly those with higher Cherokee population, the pattern of change is quite different. There, the Cherokee language continues to be used. In the grandmother's generation most were Cherokee dominant or Cherokee monolingual. In the mother's generation most are bilingual. For the children's generation, a sizable proportion are still bilingual, and most know at least some Cherokee. Thus, the shift to English is by no means universal, and a shift to English does not necessarily mean loss of Cherokee, but an increase of bilingualism.

Children's Language Proficiency

In addition to asking questions about language use, the survey included actual testing of English language proficiency for the school children through whom the families were originally selected. The test used was the Language Measurement and Assessment Inventories (LM&AI).[3] The LM&AI was used nationally in the Children's English and Services Study (CESS) to estimate the number of limited-English proficient (LEP) children in the country. In 1982 it is being used again for a new, larger national study of the number of LEP children in the English Language Proficiency Study being conducted by the Bureau of the Census and the U.S. Department of Education. The test includes both oral language speaking and listening abilities, and abilities to read and write English. A separate form of the test is used for each age group from 5 through 14. The percent of LEP children, as measured by the LM&AI, is shown for each age group in Table 7.

The proportion of children categorized as LEP shows no discernable trend or relationship to age. It is 56% for the sample overall.

---

[3] O'Malley, 1981.

Table 7. Limited-English Proficient (LEP) Children in Each Age Group

Age	% LEP	N
5	20%	15
6	54%	26
7	42%	24
8	74%	27
9	46%	28
10	78%	27
11	47%	17
12	50%	14
13	47%	19
14	--	1

Language proficiency and reported language use. There seems to be some relationship between the children's language use, as reported by the household respondents, and their tested English language proficiency, as shown in Table 8.

Table 8. English Proficiency and Reported Language Use of the Child

Reported Language Use	% LEP	N
Cherokee Dominant, English Often	75%	12
English Dominant, Cherokee Often	59%	22
English Monolingual, Cherokee Trace	59%	27
English Monolingual	50%	131

In general, the less children use English, the more likely they are to be classified as LEP. Two-thirds of the children in the sample are reported to be English monolingual; half of them test as LEP. For children who also know Cherokee, the rate of limited-English proficiency increases, to 75% for the Cherokee dominant bilinguals, but this is based on a small number of Cherokee dominant children.

The relationship of household language use patterns to children's English proficiency is shown in Table 9.

Table 9. English Proficiency and Household Language Use

Reported Language Use	% LEP	N
Cherokee Dominant, English Often	71%	24
English Dominant, Cherokee Often	46%	28
English Monolingual, Cherokee Trace	67%	39
English Monolingual	48%	101

In about half of the households where only English is spoken, the LM&AI test classifies the children as LEP. That rate increases in the Cherokee dominant bilingual households. English dominant bilingual households, however, show a rate similar to that of the English monolingual household3olds. The survey shows no straightforward relationship between household language patterns and children's English proficiency.

These rates of limited English proficiency must be interpreted with some caution. The LM&AI contains a very large component which tests reading and writing skills, and is very similar to school achievement tests. Data collection for this Cherokee study was done early in the school year and thus may underestimate the English proficiency of the children. The test has never been used specifically to report the English language proficiency of American Indian populations. There remains some question in general of how accurate the test is for a number of ethnic minority populations, including American Indians.

Opinions about Languages and Bilingualism

The survey also asked about attitudes and opinions on a range of language-related issues, including bilingualism, education, and public media.

Respondents were asked to give their opinions about language use among Cherokees in Oklahoma, both what languages they thought Cherokees do use, and what languages they thought Cherokees should use:

Using this card, please tell me which language or languages you think most Cherokee people in Oklahoma speak.

In your opinion, what language or languages should they speak?

	Do Speak	Should Speak
Only or mostly Cherokee	4%	14%
Both Cherokee and English the same	40%	76%
Only or mostly English	55%	9%
No answer	1%	1%
	100%	100%
(N)	(198)	(198)

In general, the respondents thought that most Cherokees do speak English, but a sizable number (40%) felt that most Cherokees use the Cherokee language as much as they use English. Very few felt that most Cherokees use the Cherokee language most or all of the time.

The opinions of the respondents as to what languages Cherokees should speak were quite different. Three-fourths felt that most Cherokees should be fully bilingual, using both Cherokee and English. The proportion of respondents who felt that Cherokee should be the primary language increased from 4% to 14%; the proportion that felt that English should be the primary language dropped markedly, from 55% to 9%.

Respondents were then asked about advantages or disadvantages to being bilingual.

Are there any advantages to being bilingual in Cherokee and English here in Oklahoma?

Are there any disadvantages?

	Advantages	Disadvantages
Yes	74%	10%
No	22%	83%
No answer	5%	7%
Total	100%	100%
(N)	(198)	(198)

About three-fourths of the respondents felt that there were advantages to being bilingual; only 10% thought that there were disadvantages. Respondents who answered yes to either of these questions were then asked to identify the advantages or disadvantages.

What are they (the advantages to being bilingual in Oklahoma)?

Improved communication	56%
Help on the job	26%
Maintain heritage	8%
Better social services	5%
No answer	5%
Total	100%
(N)	(146)

The most often mentioned benefit of bilingualism falls in the general category of interpersonal communication; some of the responses mention the benefits of knowing two languages. Most, however, express this as "understand other Cherokees," "communicate with older Cherokees," where the assumption seems to be that being bilingual means speaking English and adding on proficiency in the Cherokee language. The other high frequency category of benefit relates to employment, with such comments as "helps with job opportunities," "dealing with public," or "doing business." Most Cherokees also reported that they do not use the Cherokee

language on the job. The responses related to employment seem to suggest that there are benefits from added proficiency in English. There is a similar contrast in the less frequently mentioned categories. Maintaining heritage implies added benefits from knowing Cherokee; improved health and social services implies benefits from knowing English.

Only 19 respondents said that there were disadvantages to being bilingual. Most of their problems were seen as related to schooling. There was some feeling that school children may be confused by having to operate in two languages, and that teaching in school is also more difficult. A few respondents thought that being bilingual made it more difficult to communicate with some people; one respondent suggested that there may be job-related problems. Recall, however, that this entire set of responses represents only ten percent of the respondents.

Bilingual Education

Federally assisted bilingual education programs have been implemented at several schools throughout the Cherokee Nation at various times since the mid-1970's. Most Cherokee children, however, do not have access to these programs. Families in this study, all of whom have children in grade school, were asked what they thought of bilingual education in general, what should be taught, and, if their children had been involved, what they thought of that specific program.

What do you think about bilingual education programs in school?

Supportive answers	88%
Negative answers	3%
Don't know	5%
No answer	4%
Total	100%
(N)	(198)

The most common supportive answers were things like, "good idea," "great," "should be continued," "helpful, useful." A few pointed out that it was good for both Cherokees and whites, or that it was needed to preserve language and heritage. The very few negative respondents generally felt that it was not good or not necessary.

Do you think there is a need for bilingual education programs in schools?

Yes	88%
No	10%
Don't know	1%
No answer	2%
Total	101%
(N)	(198)

This question is very similar to the one above and had essentially the same response pattern, but with fewer uncertain respondents, and more negative responses. Those who answered "Yes" to this question were then asked the following open-ended question:

What do you think should be taught in bilingual education programs?

Cherokee history, culture and crafts	47%
Cherokee language	36%
English language	16%
Basic reading & writing skills	13%
	112%
(N)	(173)

(Individuals could give more than one response; they sum to more than 100%)

Clearly, for a large number of the respondents, bilingual education programs should include more than the study of language; they must also include the study of Cherokee culture, both past and present.

Nonetheless, Cherokee language is seen as an important part of the curriculum. A considerably smaller number of the respondents viewed bilingual education programs primarily as English language instruction for Cherokee-speaking children.

All of the respondents were asked if any of their children ever attended bilingual education programs:

Have any of your children ever been in a bilingual education program?

Yes	19%
No	75%
No answer	6%
Total	100%
(N)	(198)

Comparatively few of the children had ever been in a bilingual program. This is not surprising, given that the random sampling procedure used created very little overlap with the federally assisted programs.

Respondents whose children had actually been in bilingual programs were then asked how well they liked those programs:

How satisfied are you with the program, are you very satisfied, satisfied, dissatisfied, or very dissatisfied?

		Cumulative
Very satisfied	18%	18%
Satisfied	71%	89%
Dissatisfied	5%	95%
Very dissatisfied	0%	95%
No answer	5%	100%
(N)	(38)	

Overwhelmingly, those whose children were in bilingual programs were satisfied with them; a sizable number of respondents were very satisfied. Only 5% were dissatisfied. Given the general tenor of public

attitudes toward public education programs, this would seem to be strong vote of confidence in the programs.

Language Learning and Teaching at Home

Bilingual education seems to be highly valued but not generally available for the children of most respondents. The respondents were also asked what, if anything, they did at home to help their children learn either Cherokee or English.

Does anyone in this household encourage CHILD to learn English?

	Rural	Urban
Yes	61%	87%
No	29%	11%
No answer	10%	2%
Total	100%	100%
(N)	(98)	(100)

In most urban households, and in almost two-thirds of the rural households, someone tries to help the children improve their English. In almost all households the help comes from one or both parents. This assistance was given in a variety of ways, as shown below. Most of the assistance...etc. Most of the assistance with English comes through school-related activities: Encouraging the child to go to school, to study, and by helping with homework. Parents also deliberately use English when talking with the child, a few allow only English to be spoken at home; some correct the child's English grammar.

How does this person show that encouragement?

By helping with homework, encouraging school	38%
By talking with child	36%
By using and demanding correct English	17%
By reading to child	9%
By allowing only English at home	6%
By teaching importance of English	2%
By TV, books, other media	2%
(N)	(122)

(Persons who did not respond are not included; because of multiple responses, figures sum to more than 100%)

The pattern for teaching Cherokee at home is somewhat different and involves fewer households.

Does anyone in this house encourage CHILD to learn Cherokee?

	Rural	Urban
Yes	46%	31%
No	49%	68%
No answer	5%	1%
Total	100%	100%
(N)	(98)	(100)

In about half of the rural households, children are encouraged to learn the Cherokee language; only in one-third of the urban households do they get this encouragement. Again, the encouragement usually comes from one or both parents. For Cherokee, however, there are more grandparents who are involved in language instruction.

Assistance in learning Cherokee takes somewhat different forms than assistance with English.

How does this person show that encouragement?

By talking with child	68%
By helping with words, meanings	18%
By encouraging school	3%
By talking with friends	3%
By teaching importance of Cherokee	3%
By Cherokee tapes	1%
By hiring a tutor	1%
No way to learn	1%
(N)	(73)

(Persons who did not respond are not included; because of multiple responses, figures can sum to more than 100%)

Parents and other family members hope to help children learn Cherokee chiefly by using the language with them. Some help them learn the meaning of particular words or phrases. School-related concerns are not generally seen as a way of helping children learn Cherokee. In one family tape recordings are used; in another a tutor was hired. One response, that there is no way for children to learn Cherokee, suggests that the parents are resigned to their children not learning the language.

Somewhat less than half of the households encourage their children to learn Cherokee. About half of the households have very negative opinions of parents who discourage their children from using Cherokee.

What is your opinion of parents who discourage their children from speaking Cherokee?

Negative opinion	46%
Neutral opinion	15%
Positive opinion	15%
No answer	39%
Total	100%
(N)	(198)

Many families chose not to answer this question, or expressed no opinion. Of those who responded, most disapproved, some quite strongly, of parents who discouraged the use of Cherokee. The most common negative response was that it was "not right" or "unfair to the children." Others considered such parents to be prejudiced, closed minded, or ashamed of their background. Classified as neutral were responses that it was the parents' own business what they taught their children. Positive responses expressed sympathy for parents' fears that their children may be ridiculed, confused in school, or in some way disadvantaged because of using Cherokee.

Television and Radio

The survey contained several questions related to television and radio. All but four of the families have at least one TV (98%). A third of these families have two or more working television sets. Of the families with TV, fully half of them have the set turned on at least six hours per day.

Not quite as many families listen to the radio, but the number is still high, 87% overall. More urban families listen to the radio (95%) than rural families (79%). The families were asked several questions about the use of Cherokee language for radio programming:

Some people think there should be Cherokee language programs on the radio. Do you think that is a good idea?

Yes	77%
No	19%
No answer	5%
Total	101%
(N)	(198)

Of the people responding to the question, 80% approve of Cherokee language programming. There was essentially no difference in this rate across the various regions.

Approving is, of course, not the same as listening or being able to understand Cherokee language programming. So people were also asked whether or not they would actually listen to Cherokee radio.

Would people who live in this house listen to Cherokee language programs?

		Cumulative
Very often	15%	15%
Often	19%	34%
Sometimes	33%	67%
No	19%	87%
No answer	13%	100%
(N)	(198)	

About two thirds of the families indicated that someone in their household would actually listen to Cherokee language programs; one third would listen with some regularity.

The families were also asked what kind of programming they would prefer if Cherokee programs were available. The question was open-ended; they could give any and as many responses as they chose.

What kind of programs do you think should be in Cherokee

News	68%
Religious Programs	61%
Music	36%
Children's Programs	15%
Cultural Programs	5%
Soaps	2%
(N)	(119)

(Respondents who indicated that they did not understand Cherokee are not included. Because of multiple responses, the figures sum to more than 100%)

News and religious programs are the clear favorites. Among those suggesting news reports, some specifically mention news of the Cherokee Tribe. Many of those suggesting music programs indicated in particular that they were thinking of religious music or gospel singing.

The 1980 Census

Questionnaires for the 1980 Census were distributed in April, 1980, approximately 18 months before this Cherokee Language survey. Persons in the state of Oklahoma (and on Indian reservations elsewhere) who indicated to Census that they were American Indian were also asked to respond to a "1980 Census Supplementary Questionnaire for American Indians." The Bureau of Census, in response to many criticisms of the 1970 Census, made particular efforts to increase its enumeration of ethnic minorities, including American Indians. To provide some indication of the coverage, a question about the 1980 Census was included:

In 1980 the Government did another Census, but some families never received the forms or were never counted. Did you or your family receive and return the 1980 Census forms, or did anyone come to your house to do the 1980 Census?

Yes	76%
No	9%
Don't know	14%
No answer	2%
Total	101%
(N)	(198)

Eighteen months may have obscured the memories of some people, or the question may have been confusing. Nonetheless, only three-fourths of the households recalled responding to the 1980 Census.

Background Information

In the following sections more information is given on how the survey was organized, designed, conducted. Also, the procedures for selecting the respondents are discussed, and the characteristics of those respondents are also described.

Setting up the Survey

The Cherokee Language and Education Survey evolved out of a continuing interest at the NCBR in Small Language Groups. There are many small language groups in the United States for which very little information related to language use, bilingualism, and education is available. The Cherokee Nation of Oklahoma is one such group. Cherokee is also the second largest American Indian Tribe (after Navajo) which still has substantial retention of the ancestral language. From the point of view of the Cherokee Nation, available data on language and education are neither current nor comprehensive. Nonetheless, education is a number one priority for the Nation.

The overlap of these concerns and interests on the part of the NCBR and the Cherokee Nation led to an invitation from Principal Chief Ross Swimmer to the NCBR to negotiate a language and education survey with the Tribal Council. Following several interchanges with the Tribal Government, a proposal was presented to the Tribal Council. On July 13, 1981, the Tribal Council of the Cherokee Nation of Oklahoma passed a resolution to host and collaborate with the NCBR in conducting a language and education survey (Appendix I). It was agreed that the NCBR would seek the cooperation of the Tribe in defining the questions addressed in the survey, in developing a questionnaire that matched the needs of the Tribe, in selecting a representative sample, and in identifying potential staff for the work. In addition, it was agreed that the Tribe had full access to the data base and would review reports of the survey.

These points of agreement accomodated the Tribe's interest in the Survey. NCBR's interests were consistent with these, but extended beyond the Cherokee Nation to looking at patterns of language use and

education across language groups. For this reason it was determined that the basic design of the Cherokee study would provide comparability with the Children's English and Services Study (CESS). Conducted in 1978, the CESS drew a national sample to estimate the number of limited-English proficient children aged 5-14 in the United States. The CESS included both a household questionnaire with numerous language questions, and an English language proficiency study. A similar study with a much larger sample is being conducted in 1982. Neither, however, will report findings for small language groups. Inclusion of the same basic language questions and the same language proficiency test in the Cherokee study thus provides a national context for the Cherokee findings. Conversely, the Cherokee study also provides an opportunity to discover how well the findings of the national study describe the language situation of a small language group.

Julie Moss, then of the Cherokee Tribal Development Department, was the principal liaison for the Tribe. Under her leadership, a Tribal Review Panel was established, which served as the focus for the Tribe's participation. Susan Hardin, director of the social work program at Northeastern State University of Oklahoma, became the Field Coordinator for the Survey. Once schools had been identified by a random process, she negotiated with the districts for their participation. Each participating school identified a coordinator for the site and identified the persons who would do the language proficiency testing and the interviewing in the homes. The tasks for each participating district are listed in Appendix B.

Selecting the Respondents

Defining exactly who was to be surveyed was itself a rather complex task, in particular because of competing definitions of who is Indian and who is Cherokee. Three definitions of Cherokee were considered:

- Registered in the Cherokee Nation of Oklahoma
- Families with children eligible for Johnson-O'Malley benefits in school

- Families with children eligible for Title IV Indian Education Act benefits

In order to be a member of the Cherokee Nation, one must be able to show a line of descent from a Cherokee who signed the Dawes Roll in 1907. However, not all Cherokees of that time signed the Dawes Roll; their descendents are now not eligible for tribal membership. This creates a situation which is somewhat anomolous for survey design. Some Cherokees with high blood quantum are not eligible for tribal membership. Some tribal members have relatively low Cherokee blood quantum. Further, not all persons eligible for tribal membership are in fact enrolled with the Tribe. A survey based on the tribal membership was likely to systematically exclude some Cherokee language speakers.

In order to qualify for Johnson-O'Malley benefits, children must certify that they are at least one-fourth indian. This as a criterion would systematically exclude many persons who claim to be Cherokee, as well as some part of the membership of the Cherokee Nation.

In order to be eligible for Title IV benefits, children must self-identify as Indian; there is no blood quantum requirement. Since schools receive benefits for each child qualified, there is a strong incentive first to be certain that Indian children are enrolled in school, and second, that they are identified as Indian. Self-identification as a basis for the survey allows the possibility that persons whom the community does not recognize as being Cherokee might be included in the sample. However, since the survey questionnaire includes questions on ancestry, blood quantum, and tribal membership, such individuals can be isolated in the sample. This self-identification as Cherokee became the definition of Cherokee for the population that the Survey represents.

Selecting a sample through the schools has both practical benefits and principled difficulties. It is very easy to locate all of the schools through information from the Counties and from the State of Oklahoma. Each school has already identified all of the children who are Cherokee. The staff of the schools are able to contact any of the Indian families identified in this manner. This makes location of a sample feasible with limited expenditure of resources.

There are some problems, however, with working through the schools. Although the schools feel that the enrollment of Indian children has in recent years become universal, or very nearly so, the number of Cherokee children now out of school is not known. This sample is limited to children aged 5-14, the grade school years. The general feeling of most people in the area is that children do not drop out of school until after this time. The greatest risk of dropout reportedly comes at the time rural children from dependent schools transfer to the ninth grade in city junior high schools, and again, at tenth grade when they move to the senior high schools. However, it is highly likely that the children most likely not to be in school are those from the most isolated or traditional families, where it is also most likely that Cherokee language is spoken. Thus, the extent to which children are not in school introduces a potential for bias in the sample, tending to underrepresent the use of Cherokee language.

The selection of a sample through the schools also systematically excludes families that do not have children in grade school. Younger families will tend to be overrepresented in the sample, and older families will be underrepresented. Individuals without children, or who live in households without children, are not represented in the sample at all. This bias in the sample makes it highly likely that the rate of Cherokee language for the adults identified in the sample will be lower than for the total adult population. The survey, however, was deliberately designed to focus on the language and education needs of school children. Thus, its sample is more adequate for the school population than it is for the population at large.

Selection of the Schools. Communities within the traditional fourteen county area of the Cherokee Nation differ radically in the extent to which they have maintained or lost aspects of Cherokee culture, including language. Two variables which are generally considered to be related to these differences are:

- Proportion of families living in the the community that are Cherokee
- Extent to which the community is rural and isolated, or is urbanized

Using these two criteria, all of the school districts in the Cherokee Nation were divided into four groups:

- rural school with a high percentage of Indian students
- rural school with a low percentage of Indian students
- urban school with a high percentage of Indian students
- urban school with a low percentage of Indian students

The rural-urban distinction is in fact a distinction between dependent school districts (one rural school, kindergarten through eighth grade) and independent school districts (kindergarten through twelfth grade). Within each of these categories of dependent and independent school districts, the districts were ranked according to the reported percentage of Indian students. There are competing counts of the number of Indian students in each school, including the counts that schools submit to the Accreditation Office of the Oklahoma State Department of Education, the number of students receiving John-O'Malley benefits, and the number of students receiving Indian Education Act Title IV benefits. This latter number is the most inclusive category and was the basis for ranking the schools.

Two schools were randomly selected from the top half and two from the bottom half of each of these lists. One high percentage school and one low percentage school declined to participate in the study. These were replaced by randomly selected schools from the respective lists.

This sampling procedure reflects the overall population of the Cherokees living in the area of the Cherokee nation. It may, however, not well represent the most extreme communities in each of the four categories. In particular, the language characteristics of the most isolated communities with the highest proportion of Cherokees may be under-represented.

By this random process, eight schools, two from each of the four categories, became the basis for selecting the children. These schools and selected characteristics are identified in Table 10.

Table 10. Classification of Participating Schools

RURAL (DEPENDENT) SCHOOLS

High Percent of Indian Students

Bell (Adair County)
Spavinaw (Mayes County)

Low Percent of Indian Students

Keys (Cherokee County)
Lowry (Cherokee County)

URBAN (INDEPENDENT) SCHOOLS

High Percent of Indian Students

Stilwell (Adair County)
Greenwood, Tahlequah District (Cherokee County)

Low Percent of Indian Students

Vian (Sequoyah County)
Watts (Adair County)

Selecting the Children and Families. Each of the eight participating schools reported its total number of Cherokee children, aged 5-14, to NCBR. A randomized, numbered list of the children to be included was then constructed. Also, a randomized pool of replacement numbers was provided in case the first list contained brothers or sisters of children already selected, or if parents declined to participate. Parents of the selected children were sent Consent Forms in English (Appendix C). If the forms were not signed and returned, the parents were contacted by phone or in person. If the family was known or thought to speak no or limited English, the contact was generally made by a Cherokee-speaking staff member.

Some families asked not to participate. The schools report that these were generally Cherokees with low blood quantum. Apparently, some families perceived this to be a study of the Cherokee language (rather than a study of the languages of Cherokee people) and reported that it would not be relevant or appropriate for their families. Not all of the reasons that families gave for not participating are documented. In general, it appears non-participation has caused the sample to underrepresent the proportion of families who are nominally Cherokee or who identify their children as Cherokee to the school, but who are on the fringe of Cherokee culture or language. Nonetheless, the sample does contain a few families whose children were identified as Cherokee in the school, but where the basis for that identification could not be substantiated in the household interview, i.e., neither parent claimed to be American Indian, Cherokee, enrolled in the Tribe, have any Indian blood quantum, or have any ancestors on the Dawes Roll. These families were excluded from the preceding tabulations of household language use. Participating families were paid a stipend of five dollars.

Designing the Questionnaire

The questionnaire evolved through many drafts, with reviews and contributions from many individuals. For the first step, the language and related sections of many previous questionnaires were sent to the Tribal Government and to the Field Coordinator. These were then

reviewed internally by the Tribe. Some topics were eliminated, e.g., questions of income and direct questioning on social services such as welfare, or on religion. Other priority areas were marked for inclusion: Bilingual education, language attitudes, Cherokee ancestry and identification, and the language use of older generations. At NCBR a draft was assembled accomodating all of these concerns, but within the general framework of the CESS and the national Survey of Income and Education. This draft was reviewed both by the Tribe and by NCBR staff and consultants with language survey experience. On the basis of comments generated at this time, the questionnaire was revised and sent to a panel of Indian researchers for external review. It was also sent for review to the funding agency, the National Insitute of Education. It was revised again on the basis of the resulting comments and sent to the Tribe for final edit and approval.

The questionnaire was constructed in English. Constructing a parallel form in Cherokee was judged to be impractical. It would be possible to locate interviewers who could speak Cherokee, but the likelihood of finding enough who could also read Cherokee seemed very small at best. Instead, it was determined to provide Cherokee-speaking interviewers with backup consulting from the Tribe and with some discussion of those points of translation which appeared most problemmatic. This included in particular the choice of Cherokee terms for such words as "usual" and "often" which critically affected the household language questions.

The major sets of variables included are listed in Table 11. The actual questionnaire is included in Appendix D.

Through this somewhat elaborate review and editing process, the questionnaire came to contain a very large amount of language information. Some of its important characteristics are:

- It was designed in such a way that its language questions matched closely with those in the national data sets such as the Survey of Income and Education and the Children's English and Services Study. Consequently the findings of the Cherokee survey can be compared to national findings.

Table 11. A Summary list of Variables in the Questionnaire

Social Demographic Variables (for the household)

Size of the family
Number of children in the family
Education, Occupation of the household head
Marital status

Cultural Variables (for adults and grandparents)

Blood quantum
Tribal identification
Tribal Registration
Favorite TV shows, dishes, musicians

Language Variables (for child, adults, and grandparents)

Language usage generally
Home language
Language proficiency
Language usage in specific social context
Language preference

Attitudes Towards Language Issues (answered by the respondent)

Language Cherokees should speak
List the advantages of being bilingual
Should parent encourage kids to speak Cherokee
Opinion on bilingual education
What should be taught in bilingual education

Interviewers' subjective assessment (filled in by interviewers)

Physical feature of the respondent
The skin color of the respondent
The English accent of the respondent
The type of dwelling unit
Cooperativeness of the respondent in the interview

English proficiency test scores (for the targeted child)

Comprehension test
Pictorial test
Synonyms test
Cloze test
Idiom test

- Close attention was given to the distinctive characteristics of the Cherokee community by the inclusion of many questions to tap this aspect, e.g., the questions on blood quantum, tribal identification, and tribal enrollment.

- Many open-ended questions were included to tap the subjective responses of the respondents, e.g., the questions on opinion towards bilingual education, on identifying the advantages of bilingualism or the Cherokee language.

- The questionnaire asked the same language question of the children, the parents, and of earlier generations, thus permitting examination of the processes of language maintenance and language shift in the Cherokee community for at least three generations.

- The questionnaire included information not only on indiviudals, but also on households. In this way it allows study of language interaction in the household and its relationship to heritage.

Characteristics of the Sample

As discussed above with respect to the selection of the sample, households were selected from each of four different community types. Equal numbers of households were selected from each type. The identifiably Cherokee households maintain essentially equal distribution in the four community types.

Table 12. Residence of the Sample

Community Type	%
Rural, high percentage of Indian students	26%
Rural, low percentage of Indian students	24%
Urban, high percentage of Indian students	25%
Urban, low percentage of Indian students	26%
Total	101%
(N)	(192)

In general, the respondents were longtime residents of those communities. Half (52%) had lived in their respective communities all of their lives. Of the others, about half had lived outside the state of Oklahoma at some time; 8% for more than ten years. Others had lived outside their present county (25% of the total) or in other communities within the same county (5%).

Family Size and Structure. The number of children per household ranged from one to eight. Eighty percent of the households had three or fewer children. Almost a third of the children (29%) had at least one brother or sister who lived in another household. Most of the households consisted of three to five individuals, as shown in Table 13.

Table 13. Number of Persons in the Household

Persons	%
two	3%
three	16%
four	35%
five	23%
six	12%
seven or more	12%
Total	101%
(N)	(192)

Two-thirds of the children who had been identified in the school lived with both parents; another fifth lived in a one-parent household. Other households had various structures, shown in Table 14.

Table 14. Family Structure

Structure	%
Living with both parents	66%
Living with mother, stepfather	8%
Living with father, stepmother	1%
Parents not living together	19%
Both parents live elsewhere	5%
One or both parents deceased	1%
Total	101%
(N)	(192)

Socio-Economic Characteristics. Of the adults in the sample, about one-fifth had not attended high school; another fifth had had at least some college. The majority of the sample had attended at least some high school.

Table 15. Education of Adults

Education	Respondent	Spouse of Respondent
1st-7th grade	9%	9%
8th grade	11%	10%
9th-11th grade	23%	24%
12th grade	37%	36%
Some college	13%	11%
College 4 years or more	8%	9%
Total	101%	99%
(N)	(190)	(166)

The main occupation of the household was defined as the highest status job of any adult in the household. About one-quarter of the households had white collar jobs; another quarter had no full-time employment.

Table 16. Household Main Occupation

Occupation	%
White collar (professsional, manager, clerk, sales)	27%
Craftsmen & semi-skilled	29%
Unskilled	18%
Unemployed, retired, disabled	26%
Total	100%
(N)	(192)

Based on education and occupation, the sample may be considered in three social groups with the following characteristics:

- An upper stratum with college education and white collar jobs. This upper stratum includes about one-quarter of the sample.
- A middle stratum with high school education and blue collar jobs. This middle group includes about half of the sample.
- A lower stratum in which no one in the household attended high school and no member of the household held a full-time job. This group is about one-quarter of the sample.

The "Cherokeeness" of the Sample

As discussed above, there are a number of different ways that "Cherokee" may be defined. The sample was selected on the broadest of these definitions, self-identification. Within this sample, however, it is possible to identify various groups, based on measures of blood quantum and tribal membership.

Each person who was identified as American Indian was also asked to identify tribe. One measure of "Cherokeeness" is whether any adult in the household claimed to be Cherokee. Of the total sample of 198 households, 192 or (95%) identified at least one adult as Cherokee. A

few households contained members of other tribes, including 8 Creek, 7 Choctaw, 2 Comanche, 2 Pawnee, and one each, Mohawk and Arapaho.

Blood Quantum. Approximately one-quarter of the parents in the sample were full blood Cherokee; slightly less than one-quarter claimed no Cherokee blood quantum. The range of blood quantum for parents and for grandparents on the mother's side is shown in Table 17.

Table 17. Indian Blood Quantum

Blood Quantum	Father	Mother	Mother's Father	Mother's Mother
Full Blood	23%	26%	43%	39%
.75-.99	7%	8%	3%	6%
.50-.74	10%	8%	7%	5%
.25-.49	12%	13%	6%	9%
.01-.24	24%	31%	18%	17%
Zero	23%	14%	24%	24%
Total	99%	100%	101%	100%
(N)	(146)	(170)	(162)	(166)

Tribal Membership. For about half of the households, at least one member is enrolled in the Cherokee Nation of Oklahoma. For the other half, either both parents were stated not to belong to the Tribe, or they did not respond to the question (16% of the sample).

Table 18. Tribal Membership

Both parents belong	15%
One parent belongs	31%
Neither parent belongs	37%
No Information	16%
Total	99%
(N)	(198)

These indicators of "Cherokeeness" are extremely important in their relationship to the language patterns of the sample. Any discussion of rate of language change or language maintenance must include an explicit statement of what Cherokees are being discussed.

The Data Set

Because of the range of questions included in the survey, the data set contains a great amount of information. There are, however, some problems with the data set overall, and particular problems with the responses to certain questions.

As mentioned above, there are limits on the population from which the survey sample was selected. It is a sample of families with children aged 5-14 in public schools, who self-identify as Cherokee. What proportion of the overall population this includes, or how well it reflects characteristics of the overall population has not been estimated, and in some respects perhaps cannot be estimated. The schools included in the survey make the sample somewhat more representative of the middle range of communities with respect to isolation and proportion of Cherokee population than it is of either extreme.

In addition to questions related to the selection of particular communities for inclusion in the survey, there are other possibilities for bias that have not been assessed. Many of the interviewers were persons associated with the local schools. To the extent that respondents are aware of this, that may have influenced responses. Not all of the interviewers were Cherokee bilinguals. In at least one case where the respondent was Cherokee monolingual, a child in the household functioned as interpreter. The data have not been analyzed to determine if interviewer characteristics influenced the responses. All of the interviewers and 80% of the respondents were females. There is no estimate of what effect, if any, this disproportionate representation of sexes may have had.

There is also a problem of missing, and sometimes contradictory, information. Particularly for certain questions, interviewers did not indicate any response (including "no response"). For some questions,

this happened with enough frequency that results must be interpreted with extreme caution. There are also contradictory responses that were not resolved by the interviewer, e.g., the reported household language patterns are not consistent with the reported language use patterns of all the individuals in the household, or the blood quantum of parents is not consistent with the blood quantum of parents' parents. In some instances the questionnaire contains enough redundancy that these contradictions can be resolved.

Computerizing the Data. Because of the extended process of negotiating the content of the questionnaire, it was not possible to precode all of the responses. As a result, the conversion to numeric form was an extended process that occurred after the survey had been completed. During this process, a number of new variables were created out of responses to various sets of questions. For example, the household occupation variable was created by examining the occupation of all the adults in the household, and chosing the one that would yield the highest income or prestige. A marital status variable was created by examining whether both the mother and the father lived in the household. The household language variable was created, as described above, by combining responses to three separate questions about language use in the household. Individual language use variables were created in the same way.

The result of all of this is a computer file of about 350 variables for 198 cases. The data have been structured as an SPSS (Statistical Package for the Social Sciences) file. Its structure is outlined in Table 19.

Table 19. The Data File Structure

Card Position in the SPSS file	The Nature of the data stored in that card position	An example of a variable	Original Source in the questionnaire
1	The child identified at school	e.g., age of the child	Table: Child
2	The respondent who answered the questionnaire for the family	e.g., age of the respondent	Table: Adult
3	The spouse of the respondent (or other adult in the household if there is no spouse)	e.g., age of the other adult	Table: Adult
4	An ancestor of the respondent	e.g., birth year of grandfather	Table: Ancestor
5	Aggregated household data	e.g., average blood quantum in the household	A summary measure of each variable in the child, adult, ancestry Tables
6 and 7	Survey questions answered by	e.g., what's your opinion on bilingual education? e.g., who in the household has participated in BIA?	The Questions not in the Tables
8	English proficiency test	e.g., the score on the idiom test	A separate questionnaire on test scores
9	Recoded or newly created variables	e.g., household occupation	Recodes from Tables and survey questions

The data are of five general types:

- Individual data for the focal child, the respondent and one other adult in the household, and for one ancestor (stored on Cards 1 to 4 for each case).

- Aggregated household data, giving an average for the individual data on selected variables, e.g., the average adult blood quantum for the household is the sum for individuals divided by the total number of individuals (stored on Card 5 for each case).

- General survey data for the household as a whole, answered by the respondent (stored on Cards 6 and 7 for each case).

- The child's language proficiency test scores (stored on Card 8 for each case).

- Derived variables (stored on Card 9 for each case).

The actual Coding Manual used to quantify the data is given as Appendix E.

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APPENDICES

Appendix A	Resolution of Cooperation
Appendix B	Scope of Work for Participating Districts
Appendix C	Family Consent Form
Appendix D	Letter to Parents

Appendix A Resolution of Cooperation

Appendix A

RESOLUTION #53-81

Technical Survey Assistance From
The National Center For Bilingual Research

WHEREAS, it is the intent of the National Center for Bilingual Research to seek formal approval from their funding agency, the National Institute of Education, to conduct a language survey of the Cherokee Tribe, and

WHEREAS, the results of the survey will be valuable to the administration in determining bilingual education needs and policy of the Cherokee Nation,

NOW THEREFORE BE IT RESOLVED, that the Cherokee Nation hereby authorizes the administration to cooperate with and accept technical survey assistance from the National Center for Bilingual Research upon funding approval of the project from the National Institute of Education.

CERTIFICATION

I, the undersigned as President of the Cherokee Nation Tribal Council, do hereby certify that the Cherokee Nation Tribal Council is composed of fifteen (15) members, of whom twelve (12) constituting a quorum, were present at a meeting thereof duly and regularly called, noticed, convend, and held this 13th day of July, 1981, and that the foregoing resolution was duly adopted at such meeting by the affirmative vote of twelve (12) members.

Dated this 13th day of July, 1981.

R. Perry Wheeler, President

ATTEST:

Gary D. Chapman, Secretary/Treasurer

Appendix B Scope of Work for Participating Districts

Appendix B

SCOPE OF WORK FOR CHEROKEE LANGUAGE SURVEY SUBCONTRACTS

Tasks:

1. Report total number of Cherokee ancestry children to Field Coordinator.
2. Select 25 children and families, and 15 alternate children and families according to procedures worked out with the Field Coordinator.
3. Arrange for a place in the school and for person to do 50 language proficiency tests.
4. Arrange for the proficiency administrators to be at the proficiency test training session.
5. Supervise administration of the language proficiency testing and collect the completed proficiency test booklets.
6. Arrange for three to five people to do 25 full home interviews in the last two weeks of October.
7. Arrange for home interviewers to be at the planned interviewer training.
8. Provide home interviewers with names and addresses of selected children and families.
9. Supervise the home interviewing, including the assignment of homes to interviewers, verification of interviews, providing appropriate supplies to interviewers, record keeping.
10. Pay tester and interviewers for their services, supervise payment of stipends to families, and provide Field Coordinator with a record of all expenses.

Appendix C Family Consent Form

Appendix C

INDIAN LANGUAGE AND EDUCATION SURVEY

FAMILY CONSENT FORM

____ School is participating in a survey of language and education among Indian families. The study is being done with the cooperation of the Cherokee Nation of Oklahoma, the Northeastern State University and the National Center for Bilingual Research.

The study will provide important information to the schools and to the Tribe for planning education programs for your children and for the community. This study will include a language test in school for children and an interview at your home. The tests will not affect your children's grades or placement at school. Your family's privacy will be protected completely. No information that could identify your family or your children will be released.

If you would like more information about this survey, please contact

_____

_____

To be part of this study, please sign below, and return this form to the school.

Child's name _____

Parent or guardian's signature

_____

Thank you very much for your help.

Appendix D Letter to Parents

CHEROKEE NATION

P.O. Box 948 • Tahlequah, Okla. 74464 • (918) 456-0671

Ross O. Swimmer
Principal Chief

R. Perry Wheeler
Deputy Chief

October 21, 1981

Dear Parent,

The Cherokee Nation is very interested in the Cherokee language and bilingual education. The tribe is hosting and actively participating in a language use and education survey which you may know of through your child(ren's) school.

The tribal government is trying to obtain information that will be helpful to designing programs or policy in the bilingual education area and to upgrade tribal services already available. We are asking that you contribute to this effort by participating in the survey.

A certain number of schools have been selected to give a representative sample of all schools within the boundaries of the Cherokee Nation. And in order to keep that representative sample accurate, it is very important that those households that were selected do participate. It is not so much a survey of Cherokee speaking homes but a survey of what language Cherokee people use today.

You will be informed of your rights concerning the survey by a trained interviewer before the actual interview. Bilingual interviewers will be provided upon request. If you have any questions regarding the survey, do not hesitate to contact Julie Moss, tribal bilingual research coordinator, at the Cherokee Nation complex 456-0671 extension 222, long distance toll free number 1-800-722-4325. Mrs. Moss will provide answers to any questions or concerns you may have.

Sincerely,

Ross O. Swimmer
Principal Chief

ROS/jm